

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

The specification is being amended to add section headers, as requested by the Examiner. No new matter is being added.

Claims 29-53 are requested to be canceled without prejudice or disclaimer.

Claim 1 is currently being amended. Support for this amendment can be found throughout the specification as-filed, including the original claims and page 11, lines 3-4. No new matter is being added.

Claims 61-81 are being added. Exemplary support for these new claims can be found throughout the specification as-filed. Exemplary support for these new claims can be found in Appendix A to this amendment.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1 and 54-81 are now pending. Claims 55-60 are withdrawn. Thus, claims 1, 54, 61-81 are pending and being examined on the merits.

I. Restriction/Election of Species

The Examiner has made the restriction requirement final and noted Applicants' election of modified Group II and the species of Example 80. Modified Group II differs from original

Group II in that R₆ includes the definition of (i), (ii), and (iii) but not (iv). Claims 55-60 are withdrawn from consideration.

Applicants appreciate the Examiner's cooperation in modifying Group II. In view of the restriction requirement, Applicants have amended claim 1 to no longer recite definition (iv) of R₆. Thus, Applicants believe that the pending claims, other than withdrawn claims, recite only the elected subject matter.

II. Specification

The Office Action requests that the specification be amended to include appropriate headings. For example, the Office Action suggests replacing "Figure Legends" with "Brief Description of Drawings" on page 100 of the specification.

Applicants have added section headings as requested by the Examiner. Thus, the specification contains section headings as suggested by the MPEP.

III. Claim Rejections – 35 U.S.C. § 112, First Paragraph

Claim 54 stands rejected under 35 U.S.C. § 112, first paragraph, as allegedly lacking enablement. The Office Action argues that the specification fails to provide sufficient guidance to allow one of skill in the art to use the claimed composition for the treatment of all "c-kit-mediated disorders." Applicants respectfully traverse this ground of rejection.

While not acquiescing in the propriety of the rejection, Applicants have amended claim 54 to no longer recite "for treating c-kit-mediated disorders." Accordingly, claim 54 is now a composition claim not limited by a recited use. Such a claim is enabled, "if any use is enabled when multiple uses are disclosed, the application is enabling for the claimed invention." MPEP § 2164.01(c). The specification enables multiple uses of the claimed composition. For example, the specification contains *in vivo* activity showing that the claimed compounds are effective for

treating arthritis in a mouse model. *See* Spec. at page 100, lines 17-18. In addition, the specification shows that mice treated with a claimed compound displayed “significant decrease of tumor size.” Spec. at page 100, lines 11-12.

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this ground of rejection.

IV. Claim Rejections – 35 U.S.C. § 112, Second Paragraph

Claims 1 and 29-54 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. The specific reasons for rejections are addressed.

A. Claim 1 – “And/Or Bearing Or A Pendant Basic Nitrogen Functionality”

Claim 1 stands rejected for reciting “and/or bearing or a pendant basic nitrogen functionality,” because “[i]t would appear that something is missing.” In addition, claim 1 stands rejected for reciting “pendant basic nitrogen functionality,” because the phrase is allegedly unclear.

While not acquiescing in the propriety of the rejection, Applicants have amended claim 1 to recite “bearing at least one nitrogen group.” Support for this amendment can be found throughout the specification as-filed, including page 11, lines 3-4, and page 17, lines 5-10. The term “bearing at least one nitrogen group” is clear and definite to one of skill in the art. Thus, Applicants respectfully request reconsideration and withdrawal of this ground of rejection.

B. Claim 1 – “Groupthat”

The Examiner objects to claim 1 for reciting “groupthat” and suggests that the claim be amended to recite “group that.”

While claim 1 contains a typographical error in reciting “groupthat,” one of skill in the art would clearly understand that the term is a typographical error and should be “group that.” Thus the claim is clear and definite to one of skill in the art. Nonetheless, Applicants have amended the claim, as suggested by the Examiner. Thus, Applicants respectfully request reconsideration and withdrawal of this ground of rejection.

C. Other Rejections

The Office Action sets forth a number of rejections against claim 1’s dependent claims. While not acquiescing in the propriety of the rejection, Applicants have canceled claims 29-54. Thus, the amendment renders the rejections moot. Accordingly, Applicants respectfully request reconsideration and withdrawal of these grounds of rejection.

V. Double Patenting

Claims 1 and 29-54 stand “provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of copending Application No. 10/523,018.” Office Action at 16-17.

Applicants note that the double patenting rejection is provisional. Thus, Applicants will address the rejection, if it ever becomes a non-provisional rejection.

VI. Claim Rejections – 35 U.S.C. § 102

Claims 1, 29, 30, 34-38, and 48 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by each of the following references:

- (a) WO 00/33842 to Lago *et al.*;
- (b) Schantl *et al.*, SYNTHETIC COMMUNICATIONS 28(8):1451-1462 (1998);
- (c) WO 96/01825 to Hemmi *et al.*
- (d) U.S. Patent No. 3,467,666 to Dexter *et al.*;

- (e) U.S. Patent No. 3,201,409 to Spivack *et al.*

According to the Office Action, “[e]ach of the above prior art discloses at least one compound that is embraced by the instant claimed invention.” Office Action at 19.

While not acquiescing in the propriety of the rejection, Applicants have amended claim 1, so R⁴ is no longer defined as “hydrogen.” On the other hand, the compounds disclosed by references (a)-(e) possess hydrogen as R⁴. Thus, the claimed invention is novel over the references cited.

VII. Claim Rejections – 35 U.S.C. § 103

Claims 1, 29-41, 44-48, 50-52, and 54 stand rejected under 35 U.S.C. § 103 as allegedly obvious over the following references, either alone or in any combination:

- (a) WO 00/33842 to Lago *et al.*;
- (b) U.S. Patent No. 3,467,666 to Dexter *et al.*;
- (c) U.S. Patent No. 3,201,409 to Spivack *et al.*;
- (d) U.S. Patent No. 6,291,514 to Illig *et al.*;
- (e) U.S. Pat. Appl. Pub. No. 2003/0158199 to Steiber *et al.*; and
- (f) U.S. Pat. Appl. Pub. No. 2001/0044545 to Dhanoa *et al.*

According to the Office Action, references (a)-(f) “each teach substituted phenylamino-2-thiazole compounds that are either structurally the same as (see above 102 rejection) or structurally similar to the instant claimed compounds.” Office Action at 21. The Office Action concludes that one of skill in the art would be motivated to make the specifically claimed compounds “from the expectation that structurally similar compounds would possess similar activity (e.g., antagonizing the myt1 kinase receptor).” *Id.* Applicants respectfully traverse this ground of rejection.

There is no motivation to modify the prior art compounds to arrive at the specifically claimed compounds. Indeed, none of the compounds in the prior art have an R⁴ as defined in the present claims. Instead, the R⁴ of the prior art compounds is hydrogen. Surprisingly, Applicants found that when R⁴ is hydrogen, there is about a 1 log decrease in activity on the c-kit receptor. Thus, the claimed compounds are significantly more active than the prior art compounds. There is no motivation or suggestion in the prior art to modify R⁴, as claimed.

In addition, in the claimed compounds, the amino-thiazol group and the NH-R1 group are in meta position relative to each other. See claim 1. On the other hand, the structures of Dexter and Spivack are always in the para position from the amino-thiazol group. Applicants found that when the NH-R1 group are in meta position relative to each other, the claimed compounds have a significant activity on the c-kit receptor. The prior art does not suggest such a modification or the benefits achieved by making such a modification.

For at least these reasons, Applicants respectfully request reconsideration and withdrawal of this ground of rejection.

CONCLUSION

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit

Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 672-5569
Facsimile: (202) 672-5399

Stephen B. Maebius
Attorney for Applicants
Registration No. 35,264

Attached: Appendix A – Exemplary Support for New Claims